



Docket No.: OGW-0019  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Noboru Okada

Confirmation No.: 1733

Application No.: 09/726,548

Art Unit: 1733

Filed: December 1, 2000

Examiner: G. L. Knable

For: TIRE FORMING SYSTEM AND TIRE  
FORMING METHOD

**REPLY BRIEF**

MS Appeals-Patent  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**INTRODUCTORY COMMENTS**

This is a Reply Brief under 37 C.F.R. §41.41 in response to the Examiner's Answer mailed on August 9, 2004.

All arguments presented within the Appeal Brief of May 26, 2004 are incorporated herein by reference. Additional arguments are provided hereinbelow.

Within claim 1, the means for supplying the band member and the means for supplying the belt/tread member are operative to cooperate with one another to *continuously* in series form a *plurality of tires having different tire sizes yet a same bead inner diameter*.

Within claim 5, the forming system is operative to *continuously* in series form a *plurality of tires having different tire sizes yet a same bead inner diameter*.

“For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims.” *General Electric Co. v. Nintendo Co.*, 50 USPQ2d 1910, 1914 (Fed. Cir. 1999).

The inner liner servicer 60 and the carcass servicer 70 are adapted such that they can respectively supply the inner liner 65 and the carcass 75 which are used in a tire having *the same bead inner diameter* corresponding to the specified band periphery length, and the cut dimensions of the inner liner and the carcass can be changed in compliance with an oblate ratio and a tread width of the formed tire (specification at page 13, line 23 to page 14, line 5). In the above tire forming system, so long as the tire has the *same bead inner diameter*, the stage switchover can be performed instantaneously (specification at page 25, lines 12-14). The tire whose *bead inner diameter* is the same but which is different in its tire size, use and characteristics can be continuously formed in one unit (specification at page 26, lines 9-12). In the tire forming system capable of optionally changing the setting conditions of the tire size, since it is constituted such that, in regard to the formed tire having the specified band periphery length, the supply means of all parts can be optionally set in compliance with the specification of the formed tire, it is possible to perform the stage switchover instantaneously so long as the tire has the *same bead inner diameter*, so that it is possible to continuously form the tires different in specification in one unit (specification at page 29, line 16 to page 30, line 1).

Regarding these features, the Examiner's Answer alleges that one of the known advantages of the cited prior art is the ability to more easily adapt to changing size requirements for the components. The Examiner's Answer further alleges that a capability to build different tire sizes is thus implicit in or suggested by the systems taught by the references and further would have been an obvious desire of the ordinary artisan for only the expected results (Examiner's Answer at page 7).

However, the Examiner's Answer fails to provide evidence sufficient in supporting these allegations, as will be shown hereinbelow. Nevertheless these allegations fail to show that *a plurality of tires having different tire sizes yet a same bead inner diameter* is found within the cited prior art.

Specifically, the Examiner's Answer points to European Patent Application Publication No. EP 0 875 364 (EP '364) for the teaching of what would have been allegedly known to the skilled artisan at the time the claimed invention was made.

EP '364 arguably teaches a method and plant for producing a plurality of different tires wherein the dimensional features refer to the geometric measurements and to the linear profile of the tire on the cross-section (external diameter, chord or maximum width, height of the sides, and their relationship, that is, the cross-section ratio) and are those references which hereinafter are simply indicated as "size" (EP '364 at column 2, lines 13-19).

EP '364 arguably teaches that if the normal production of a series of tires is subdivided into a plurality of small lots of tires having the *same dimensional and structural features* and if said lots are produced in succession, alternating lots of various tires, then when the number of tires present in any lot is adequately proportioned, the productivity and the costs of the entire process are not negatively influenced (EP '364 at column 4, lines 31-38).

EP '364 arguably refers to a method for distribution of the production of a series of tires, *structurally or dimensionally equal to one another*, in a time period (time of production) of greater value than that time period (time of preparation) required for making the green tires (EP '364 at column 4, line 57 to column 5, line 4).

But please note that EP '364 fails to disclose, teach or suggest a bead inner diameter, and fails to show *a plurality of tires having different tire sizes yet a same bead inner diameter*.

As exemplified within the specification for the above-identified application, if six kinds of tires corresponding to the completed beads A to F are formed in order, since it is possible to supply in order the unvulcanized tires to six kinds of metal molds, it is possible to reduce the lead time by causing the forming cycle time to agree with the vulcanizing cycle time, thereby reducing the goods in process of the unvulcanized tires (specification at page 26, lines 17-24).

The Examiner's Answer also points to Japanese Patent Application No. 59-093345 (JP '345) for the teaching of what would have been known to the skilled artisan at the time the claimed invention was made.

Without the benefit of a translation for the entire publication, the abstract and figures of JP '345 arguably teach a tire component material W1 previously adjusted to much the same width as the winding length on an assembling drum 11 is pulled out from a stock roll 205 by a measure conveyer 202, and then cut off to a given length corresponding to the widthwise direction of the assembling drum 11 by a cutter 209, wherein the cut tire component materials W2 are put on a bonding conveyer 201 by a transfer device 221 and fed to near the drum 11 by the conveyer 201.

But please note that the abstract and figures of JP '345 arguably fails to disclose, teach or suggest a bead inner diameter, and fails to show *a plurality of tires having different tire sizes yet a same bead inner diameter*.

Within claim 1, the bead supply means holds plural kinds of completed beads each having a bead core corresponding to the band periphery length, selects the completed bead corresponding to the specification of the formed tire from the plural kinds of completed beads, and supplies the selected completed bead to the band forming machine through the bead setter.

Within claim 5, in the bead supply process, plural kinds of completed beads each having a bead core corresponding to the band periphery length are prepared, the completed bead corresponding to the specification of the formed tire is selected from the plural kinds of completed beads, and the selected completed bead is supplied to the band forming machine through the bead setter.

The specification discloses the bead servicer 90 as one for supplying a completed bead corresponding to a specification of the completed tire to the band forming machine 10 through the bead setter 44 (specification at page 15, lines 14-17). More concretely, the bead servicer 90 is adapted such that plural kinds of completed beads A to F are respectively held, while being classified by the kind, on plural holding arms 92 radially extending from a bead stocker 91 (specification at page 15, lines 17-21). Each of the completed beads A to F is one in

which a bead core corresponding to the band periphery length and bead fillers of variously different shapes or compounds are combined (specification at page 15, lines 21-24). The bead stocker 91 is rotatable, and adapted such that one pair of completed beads corresponding to the specification of the formed tire are selected from the plural kinds of completed beads A to F, and the selected one pair of completed beads are delivered to a bead transfer 93 (specification at page 15, line 24 to page 16, line 4). The bead transfer 93 is extended to a region just above the band transfer 40, and adapted such that the selected one pair of completed beads are supplied to the bead setter 44 through a delivering arm 94 (specification at page 16, lines 4-8).

The bead servicer 90 selects one kind of completed bead corresponding to the specification of the formed tire from the plural kinds of completed beads A to F, and they are set to the bead setter 44 of the band transfer 40 (specification at page 22, lines 15-19).

The Examiner's Answer contends that U.S. Patent No. 4,369,086 to Nakahama et al. (Nakahama), U.S. Patent No. 3,849,231 to Brey et al. (Brey), U.S. Patent No. 4,553,894 to Mukae et al. (Mukae), and European Patent Application Publication No. 0 624 456 to Krupp (EP '456) provide additional detail of the known devices and processes used to supply beads including the well-known use of storage means for a plurality of beads in the vicinity of the building line.

In response to this contention, figures 1, 2 and 4 of Nakahama arguably teach a bead supply apparatus 2 having a setter 11, as a driving source, to transmit the rotation to the screw 13 through a belt 12 (Nakahama at column 6, lines 64-66). Figures 1-5 of Nakahama show that two beads 20 are retained, by the bead retaining claws or bead retaining equipment 26, one by one in mutually parallel and concentric relation (Nakahama at column 7, line 67 to column 8, line 2).

Nevertheless, Nakahama fails to disclose, teach or suggest the bead supply apparatus 2 as selecting plural kinds of completed beads, whereby the completed bead corresponds to the specification of the formed tire is selected from the plural kinds of completed beads.

Brey arguably teaches a bead mechanism having bead storage racks 1186 and 1187 (Brey at figure 65, column 2, lines 11-12)

But Brey fails to disclose, teach or suggest the bead mechanism as selecting plural kinds of completed beads, whereby the completed bead corresponds to the specification of the formed tire is selected from the plural kinds of completed beads.

Figures 1-3 of Mukae arguably depict a bead transfer apparatus and filler-fitted bead cores B suspended from the hanger bars 38 (Mukae at column 7, lines 5-8).

Yet, Mukae fails to disclose, teach or suggest the bead mechanism as selecting plural kinds of completed beads, whereby the completed bead corresponds to the specification of the formed tire is selected from the plural kinds of completed beads.

Without the benefit of a translation for the entire publication, the abstract and figures of EP '456 arguably teach a device for the receiving and advancing of tire bead wires and for the transfer of the tire bead wires to the magnetic disc of the bead setting device of a tire building machine in green tire production during automatic building of the said green tire is provided with swivel arms (6), which can be swivelled inwards and outwards by means of a compressed-air cylinder (9) and which bring about a tensioning and centering of the tire bead wires during swivelling outwards - that is during spreading.

The Examiner's Answer relies upon a portion of the *Derwent* publication that has been provided along with EP '456, instead of a translation of EP '456 itself. The *Derwent* publication asserts that an advantage of EP '456 is to allow operation with different sizes of bead wire without the cost of additional parts for each size and enables size changes to be rapidly made.

In response to this assertion, note that EP '456 appears to be written in German and that the *Derwent* provided along with EP '456 indicates a copyright date of 1999. However, the above-identified application is entitled to benefit of the filing date of Japanese Patent Application No. 11-034894, having a priority date of December 7, 1999. As a result, the record fails to clearly show that the copyright date of "1999" for the *Derwent* publication is earlier than the priority date of December 7, 1999, and fails to clearly show that the *Derwent* publication is available as prior art.

Furthermore, without the benefit of a translation of EP '456, the context in which the assertions made in the *Derwent* publication is unverifiable.

The Examiner's Answer fails to show that within either EP '456 or the *Derwent* publication, the bead supply means holds *plural kinds* of completed beads each having a bead core corresponding to the band periphery length, selects the completed bead corresponding to the specification of the formed tire from the *plural kinds* of completed beads, and supplies the selected completed bead to the band forming machine through the bead setter, as in claim 1.

The Examiner's Answer also fails to show that within either EP '456 or the *Derwent* publication, in the bead supply process, *plural kinds* of completed beads each having a bead core corresponding to the band periphery length are prepared, the completed bead corresponding to the specification of the formed tire is selected from the *plural kinds* of completed beads, and the selected completed bead is supplied to the band forming machine through the bead setter, as in claim 5.

In response, these unsupported contentions made within the Examiner's Answer amounts to nothing more than conclusions that are personal in nature. In this regard, the teachings, suggestions or incentives supporting the obviousness-type rejection must be clear and particular. Broad conclusory statements, standing alone, are not evidence. *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

As a rule, "assertions of technical facts in areas of esoteric technology must always be supported by citation to some reference work recognized as standard in the pertinent art and the appellant given, in the Patent Office, the opportunity to challenge the correctness of the assertion or the notoriety or repute of the cited reference." (Citations omitted). *In re Pardo and Landau*, 214 USPQ 673, 677 (CCPA 1982). The support must have existed at the time the claimed invention was made. *In re Merck & Co., Inc.*, 231 USPQ 375, 379 (Fed. Cir. 1986).

"Allegations concerning specific 'knowledge' of the prior art, which might be peculiar to a particular art should also be supported and the appellant similarly given the opportunity to make a challenge." (Citations omitted). *In re Pardo and Landau*, 214 USPQ 673, 677 (CCPA 1982).



In addition, “it is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps. The references themselves must provide some teaching whereby the applicant's combination would have been obvious” (citations omitted). *In re Gorman*, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991). See also *In re Dembiczak*, 50 USPQ2d 1614, 1616 (Fed. Cir. 1999)(rejection based upon hindsight is reversed).

Moreover, the procedures established by Title 37 of the Code of Federal Regulations expressly entitle the Applicant to an Examiner’s affidavit upon request. Specifically, “when a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.” 37 C.F.R. §1.104(d)(2).

Also note that the failure to provide any objective evidence to support the challenged use of Official Notice constitutes clear and reversible error. *Ex parte Natale*, 11 USPQ2d 1222, 1227-1228 (Bd. Pat. App. & Int. 1989).

Accordingly, Applicant hereby requests a reference or an Examiner’s affidavit to support this officially noticed position of obviousness or what is well known. Further note that if this reference or Examiner’s affidavit is not provided, the assertions of what is well known must be withdrawn. See M.P.E.P. §2144.03.

In addition, this assertion amounts to nothing more than an “obvious-to-try” situation. Specifically, “an ‘obvious-to-try’ situation exists when a general disclosure may pique the scientist's curiosity, such that further investigation might be done as a result of the disclosure, but the disclosure itself does not contain a sufficient teaching of how to obtain the desired result, or that the claimed result would be obtained if certain directions were pursued.” *In re Eli Lilly & Co.*, 14 USPQ2d 1741, 1743 (Fed. Cir. 1990). Moreover, “an invention is ‘obvious to try’ where the prior art gives either no indication of which parameters are critical or no direction as to which of many possible choices is likely to be successful.” *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 10 USPQ2d 1843, 1845 (Fed. Cir. 1989).



Here, Applicants related art does not contain a sufficient teaching of how to obtain the desired result, or that the claimed result would be obtained if certain directions were pursued. "Obvious to try" is not the standard under §103. *In re O'Farrell*, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988).

Conclusion



The prior art of record, either individually or as a whole, fails to disclose, teach or suggest all the features of the claimed invention. For at least the reasons set forth hereinabove, the rejection of the claimed invention should not be sustained.

Therefore, a reversal of the Final Rejection of December 3, 2003 is respectfully requested.

If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

Dated: October 6, 2004

Respectfully submitted,

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